



Morbidity and Mortality

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE / PUBLIC HEALTH SERVICE HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

DATE OF RELEASE: MAY 18, 1973 - ATLANTA, GEORGIA 30333

EPIDEMIOLOGIC NOTES AND REPORTS

BOTULISM - West Virginia, Pennsylvania

Between May 6 and 9, 1973, 8 of 28 persons from 5 related families became ill with nausea, vomiting, and abdominal pain 12-55 hours after sharing a meal of spaghetti and assorted meats, salads, and condiments. All 8 were hospitalized, 7 in Wheeling, West Virginia, and 1 in McKeesport, Pennsylvania; 7 developed signs of neurologic dysfunction 1-3 days after onset of the gastrointestinal symptoms. Cranial nerve abnormalities, weakness, and fatigue were common, and sore throat or dryness of the mouth was reported by all.

Food-specific attack rates for 18 items served at the gathering implicated a canned fried hot pepper product as the probable vehicle, and mouse neutralization tests performed by the Food and Drug Administration on a sample of the peppers remaining from the meal identified botulinal toxin, type B. All 8 patients were given trivalent botulinal antitoxin

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(Coughaught) and are in satisfactory condition. Pretreatment serum specimens from the 8 patients were negative for detectable toxin.

The pepper product in which the toxin was detected was Nancy's Mild Hot Peppers In Oil, prepared by Felix and Sons Wholesale, Inc., Fairmont, West Virginia, a small family company operating from a private home. The peppers are fried, packed in oil in glass jars, and distributed in West Virginia, Pennsylvania, and Ohio. On May 11, the company

TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	19th WEEK ENDING		MEDIAN 1968-1972	CUMULATIVE, FIRST 19 WEEKS		
	May 12, 1973	May 13, 1972		1973	1972	MEDIAN 1968-1972
Aseptic meningitis	24	56	26	695	664	544
Brucellosis	2	1	4	50	44	52
Chickenpox	6,333	5,190	---	108,820	81,421	---
Diphtheria	—	1	1	72	40	66
Encephalitis, primary:						
Arthropod-borne and unspecified	29	13	20	372	297	371
Encephalitis, post-infectious	13	7	9	93	101	118
Hepatitis, serum (Hepatitis B)	182	174	125	2,782	3,480	2,493
Hepatitis, infectious (Hepatitis A)	1,014	1,171	1,113	18,718	20,985	20,721
Malaria	6	35	84	82	494	938
Measles (rubeola)	1,098	1,399	1,399	16,564	17,996	17,996
Meningococcal infections, total	40	43	47	655	657	1,259
Civilian	39	42	42	638	629	1,130
Military	1	1	2	17	28	131
Mumps	2,176	2,191	3,022	38,539	40,900	52,450
Rubella (German measles)	1,215	788	2,283	18,962	14,573	28,158
Tetanus	1	4	3	25	34	34
Tuberculosis, new active	701	645	---	11,547	11,868	---
Tularemia	1	2	2	21	41	33
Typhoid fever	5	6	6	307	95	92
Typhus, tick-borne (Rky. Mt. spotted fever)	9	10	10	30	31	21
Venereal Diseases:						
Gonorrhea	17,856	13,289	---	280,479	248,066	---
Syphilis, primary and secondary	469	509	---	9,754	8,689	---
Rabies in animals	94	87	79	1,331	1,652	1,479

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	1	Poliomyelitis, total: Calif. - 1.	1
Botulism:	—	Paralytic: Calif. - 1	1
Congenital rubella syndrome: Hawaii - 1, Va. - 1	9	Psittacosis: Calif. - 2	5
Leptosy: Calif. - 1	42	Rabies in man:	—
Leptospirosis:	11	Trichinosis: N. Mex. - 1	33
Plague:	—	Typhus, murine: Miss. - 1	7

BOTULISM – Continued

voluntarily recalled all of their products. Studies to determine the error in processing are in progress.

Since the initial investigation, 4 additional cases of gastroenteritis associated with the ingestion of this pepper product have been reported to CDC. One of the ill persons had eaten peppers left over from the May 6 meal, but the other 3 were not related to the initial patients and lived in 3 separate communities in the tristate area. All 4 patients were treated with botulinum antitoxin. No neurologic symptoms have been reported in any of these patients.

(Reported by George Kellas, M.D., Director, Medical Education, Francis Gaydosh, M.D., Thomas Ritz, M.D., Michael Caruso, M.D., and Richard Terry, M.D., Wheeling Hospital, Wheeling, West Virginia; Thomas L. Thomas, M.D., Director, and Jack E. Clem, Administrative Assistant to the Director, Wheeling-Ohio County Health Department; William L. Cooke, M.D., Director, Division of Disease Control, and N. H. Dyer, M.D., Director of Health, West Virginia Department of Health; Walter McElroy, M.D., McKeesport Hospital, McKeesport, Pennsylvania; Eleanor Streiff, Director, Supportive Services, Hugh Robins, M.D., Assistant Deputy Director, Medical Services, Gerald Barron, Administrator, Food Division, and Joseph

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Editorial Note

Patients in this outbreak presented with characteristic symptoms closely resembling those in a carefully documented family outbreak of type B botulism (1). The illness in the current outbreak was relatively mild; fixed dilated pupils and respiratory impairment, 2 commonly reported signs, were not observed. No additional cases have been reported since the product was recalled.

Including the present episode, 81 botulism outbreaks have been reported to CDC from the United States in the past 10 years, and 7 have been traced to peppers; 3 were caused by type A toxin, 3 by type B, and 1 by an unidentified toxin. Of these 7 outbreaks, this is the 1st caused by a commercially processed pepper product.

Reference

1. Koenig MG, Drutz DJ, Mushlin AI, Schaffner W, Rogers DE: Type B botulism in man. *Am J Med* 42:208-219, 1967

INTERNATIONAL NOTES
FOLLOW-UP ON SMALLPOX – United Kingdom

As previously reported (MMWR, Vol. 22, No. 14), 3 cases of smallpox occurred in the United Kingdom in March and April 1973. Two of these were secondary cases in a 34-year-old man and his 29-year-old wife who were contacts of the index case; both of these patients died. On April 27, the United Kingdom reported a 4th case of smallpox in a 22-year-old nurse who provided care to the 2nd and 3rd patients. The nurse gave a history of vaccination in childhood and a subsequent vaccination at an unknown time; because she had had close contact with the secondary cases on April 4 and 5, she was revaccinated on these 2 dates. On April 14, she became ill with fever, headache, and backache and had 2 small

papular eruptions on the dorsum of her hand. The illness lasted a few days and then spontaneously disappeared. Examination of these lesions for smallpox by electron microscopy was negative, and no virus was isolated in chicken eggs. The case was reported as *variola sine eruptione* on the basis of clinical evidence. As of May 13, 1973, metropolitan London was declared smallpox-free.

(Based on information provided by the Department of Health and Social Security, England; and the World Health Organization: *Weekly Epidemiological Record*, Vol. 48, Nos. 13, 14, and 17.)

SURVEILLANCE SUMMARY
SMALLPOX – Worldwide

WORLDWIDE

Through May 1, 1973, a total of 46,915 cases of smallpox had been reported to the World Health Organization (WHO) in 1973, an increase of 79% over the total recorded at this time last year. The increase is entirely attributable to a substantial increase in incidence in Bangladesh and northern India, where the most serious epidemics in many years have occurred this season. In all other countries, smallpox incidence declined sharply or, as in the case of Pakistan, remained essentially unchanged.

In 1970, a record low in smallpox incidence was recorded—33,640 cases. With the extension and improvement of surveillance activities and more complete reporting, the number of cases rose to 52,770 in 1971 and to 65,087 in 1972. This was regarded as an encouraging development: more cases were being detected, but more outbreaks were being contained. In 1973, based on present trends, a further increase in cases can be anticipated. Most of this increase,

however, reflects not improved notification, but a substantial increase in incidence in India and Bangladesh. The eventual total of cases in these 2 countries will depend on the efficacy of emergency measures now being taken. However, if present trends continue, India could record more than 60,000 cases, and Bangladesh 40,000 cases—over 90% of the world's total.

Although smallpox incidence increased this year, the number of countries reporting 1 or more cases each month continued to decline. In December 1972 and January and February 1973, 6 countries reported cases, the fewest ever to record cases in a given month. In 1973, smallpox cases have occurred in 10 countries; 4 of them—Ethiopia, Bangladesh, India, and Pakistan—account for all except 51 cases.

India

A serious threat to the success of the global eradication program was the development this year of major epidemics of smallpox across most of northern India, especially in the

(Continued on page 167)

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES FOR WEEKS ENDING MAY 12, 1973 AND MAY 13, 1972 (19th WEEK)

AREA	ASEPTIC MENINGITIS	BRUCellosIS	CHICKEN-POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS		
						Primary including unspc. cases		Post Infectious	Serum (Hepatitis B)	Infectious (Hepatitis A)	
						1973	1972			1973	1973
UNITED STATES	24	2	6,333	-	72	29	13	13	182	1,014	1,171
NEW ENGLAND	-	-	1,086	-	2	2	1	1	3	58	92
Maine*	-	-	24	-	-	-	-	-	-	-	7
New Hampshire *	-	-	20	-	-	-	-	-	-	3	7
Vermont	-	-	58	-	-	-	-	-	-	5	3
Massachusetts	-	-	640	-	-	2	1	-	-	29	51
Rhode Island	-	-	119	-	2	-	-	-	1	6	13
Connecticut	-	-	225	-	-	-	-	1	2	15	11
MIDDLE ATLANTIC	2	-	489	-	-	2	1	1	42	192	165
Upstate New York	1	-	1	-	-	-	-	-	4	45	35
New York City	1	-	171	-	-	1	-	-	18	45	36
New Jersey	-	-	NN	-	-	-	1	-	9	53	57
Pennsylvania	-	-	317	-	-	1	-	1	11	49	37
EAST NORTH CENTRAL	2	-	2,457	-	-	8	3	1	27	162	213
Ohio *	-	-	527	-	-	3	2	-	8	59	47
Indiana	-	-	210	-	-	-	-	-	-	6	7
Illinois	-	-	-	-	-	-	-	1	9	48	68
Michigan	2	-	485	-	-	5	1	-	10	45	87
Wisconsin	-	-	1,235	-	-	-	-	-	-	4	4
WEST NORTH CENTRAL	1	-	458	-	7	1	1	1	4	33	57
Minnesota	-	-	-	-	-	-	-	1	-	7	2
Iowa	1	-	374	-	-	1	-	-	-	1	9
Missouri	-	-	29	-	-	-	-	-	-	8	26
North Dakota *	-	-	33	-	-	-	-	-	-	-	3
South Dakota	-	-	2	-	7	-	-	-	-	-	2
Nebraska	-	-	5	-	-	-	-	-	4	1	1
Kansas	-	-	15	-	-	-	1	-	-	16	14
SOUTH ATLANTIC	3	-	518	-	-	3	1	-	12	121	141
Delaware	-	-	-	-	-	-	-	-	-	-	-
Maryland	-	-	48	-	-	-	-	-	2	11	24
District of Columbia	-	-	8	-	-	-	-	-	-	-	5
Virginia	-	-	75	-	-	1	-	-	3	9	34
West Virginia *	-	-	228	-	-	-	1	-	-	8	8
North Carolina	1	-	NN	-	-	2	-	-	6	28	21
South Carolina	-	-	159	-	-	-	-	-	-	13	19
Georgia	-	-	-	-	-	-	-	-	-	10	6
Florida	2	-	-	-	-	-	-	-	1	42	24
EAST SOUTH CENTRAL	3	1	148	-	-	2	-	-	13	83	62
Kentucky	-	-	110	-	-	-	-	-	4	19	19
Tennessee	2	-	NN	-	-	2	-	-	3	48	39
Alabama	-	-	37	-	-	-	-	-	3	9	2
Mississippi	1	1	1	-	-	-	-	-	3	7	2
WEST SOUTH CENTRAL	4	-	529	-	3	4	1	3	11	141	176
Arkansas *	-	-	41	-	-	-	-	-	2	2	4
Louisiana *	1	-	NN	-	-	2	-	2	8	21	13
Oklahoma	1	-	62	-	-	1	1	-	1	11	28
Texas	2	-	426	-	3	1	-	1	-	107	131
MOUNTAIN	-	-	179	-	2	-	1	1	3	36	47
Montana	-	-	46	-	-	-	1	-	-	7	3
Idaho	-	-	-	-	-	-	-	-	-	10	5
Wyoming	-	-	8	-	-	-	-	-	-	-	-
Colorado	-	-	24	-	-	-	-	-	1	9	12
New Mexico	-	-	62	-	2	-	-	1	-	8	11
Arizona *	-	-	-	-	-	-	-	-	-	1	12
Utah	-	-	39	-	-	-	-	-	2	-	4
Nevada	-	-	-	-	-	-	-	-	-	1	-
PACIFIC	9	1	469	-	58	7	4	5	67	188	218
Washington	-	-	412	-	53	-	-	-	4	29	29
Oregon	-	-	2	-	3	-	1	-	2	16	29
California	9	1	-	-	2	7	2	5	61	134	146
Alaska	-	-	14	-	-	-	1	-	-	-	7
Hawaii	-	-	41	-	-	-	-	-	-	9	7
Guam *	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	-	-	20	-	-	-	-	-	-	18	24
Virgin Islands	-	-	4	-	-	-	-	-	-	-	-

*Delayed reports: Aseptic meningitis: Guam 1
 Chickenpox: Me. 7, N.H. 47, Ark. 6, Guam 28
 Encephalitis, primary: N. Dak. 1
 Hepatitis B: N.H. 1, Ohio 12, Ariz. 1
 Hepatitis A: Me. 10, N.H. delete 1, Ohio delete 12, W. Va. 1,
 Ark. 5, La. delete 1, Ariz. 21, Guam 2

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING MAY 12, 1973 AND MAY 13, 1972 (19th WEEK) - Continued

AREA	MALARIA		MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS		RUBELLA	
	1973	Cum. 1973	1973	Cumulative		1973	Cumulative		1973	Cum. 1973	1973	Cum. 1973
				1973	1972		1973	1972				
UNITED STATES	6	82	1,098	16,564	17,996	40	655	657	2,176	38,539	1,215	18,962
NEW ENGLAND	1	6	365	5,978	1,671	3	30	28	107	1,718	221	2,586
Maine *	-	-	1	19	171	-	-	3	1	130	-	41
New Hampshire *	-	-	4	738	163	2	6	1	-	144	27	311
Vermont	-	2	2	93	95	-	2	-	19	213	16	27
Massachusetts	1	2	205	3,274	276	-	11	14	34	588	113	1,475
Rhode Island	-	-	79	395	279	-	1	8	17	171	2	164
Connecticut	-	2	74	1,459	687	1	10	2	36	472	63	568
MIDDLE ATLANTIC	1	11	80	1,285	735	5	96	75	359	4,821	217	2,871
Upstate New York	1	6	32	332	91	-	35	18	NN	NN	13	231
New York City	-	1	25	652	154	2	18	21	200	2,870	44	283
New Jersey	-	1	8	150	454	1	21	18	109	1,128	148	2,154
Pennsylvania	-	3	15	151	36	2	22	18	50	823	12	203
EAST NORTH CENTRAL	2	11	385	5,413	7,024	3	75	90	728	10,672	255	4,095
Ohio	-	2	12	212	196	2	36	33	232	1,999	36	533
Indiana	-	1	26	452	994	-	2	9	42	806	37	760
Illinois	2	6	94	1,186	2,523	-	12	19	121	1,880	26	622
Michigan	-	2	205	2,783	1,246	1	22	25	187	2,923	93	1,068
Wisconsin	-	-	48	780	2,065	-	3	4	146	3,064	63	1,112
WEST NORTH CENTRAL	-	4	7	316	664	6	56	56	123	3,614	111	1,040
Minnesota	-	1	1	15	14	-	-	11	1	72	22	181
Iowa	-	-	5	209	430	3	11	2	87	2,361	1	150
Missouri	-	1	-	22	142	2	28	18	14	436	1	228
North Dakota	-	1	1	44	39	-	3	-	-	50	66	233
South Dakota	-	-	-	-	4	-	3	2	4	11	15	21
Nebraska	-	-	-	3	17	-	4	7	3	80	6	136
Kansas	-	1	-	23	18	1	7	16	14	604	-	91
SOUTH ATLANTIC	-	9	56	832	1,535	4	105	140	191	4,463	104	1,497
Delaware	-	-	-	5	12	-	-	1	10	205	1	7
Maryland	-	-	-	1	12	-	16	24	19	457	-	8
District of Columbia	-	-	-	-	-	1	2	4	4	22	-	2
Virginia	-	4	7	351	44	1	17	33	18	419	11	363
West Virginia	-	6	6	142	184	-	2	6	53	1,530	16	197
North Carolina	-	1	-	4	27	1	20	21	NN	NN	12	184
South Carolina	-	1	11	48	177	-	7	13	12	288	8	72
Georgia	-	-	17	35	122	-	17	3	3	20	1	7
Florida	-	3	15	246	957	1	24	35	72	1,522	55	657
EAST SOUTH CENTRAL	-	2	34	495	900	3	60	56	185	2,509	34	955
Kentucky	-	-	17	333	468	1	24	19	44	756	11	334
Tennessee	-	-	15	129	169	-	20	21	61	975	14	339
Alabama	-	2	-	-	120	1	11	10	66	336	5	120
Mississippi	-	-	2	33	143	1	5	6	14	442	4	162
WEST SOUTH CENTRAL	1	9	12	532	1,065	7	105	80	124	2,503	66	1,220
Arkansas *	-	-	3	62	10	1	12	7	18	204	2	95
Louisiana	1	2	2	61	69	-	21	23	2	50	6	83
Oklahoma	-	1	1	39	9	3	10	6	9	272	1	150
Texas	-	6	6	370	977	3	62	44	95	1,977	57	892
MOUNTAIN	-	7	11	432	1,265	3	16	12	84	1,945	55	1,997
Montana	-	1	-	12	12	1	4	2	8	172	19	421
Idaho	-	-	5	189	16	-	1	3	2	101	2	19
Wyoming	-	-	-	10	1	-	-	1	4	417	-	5
Colorado	-	1	1	113	382	1	3	2	24	266	31	1,337
New Mexico	-	1	5	97	84	1	3	1	45	767	2	137
Arizona	-	4	-	10	624	-	2	1	-	140	-	15
Utah	-	-	-	1	146	-	1	1	1	75	1	60
Nevada	-	-	-	-	-	-	2	1	-	7	-	3
PACIFIC	1	23	148	1,281	3,137	6	112	120	275	6,294	152	2,701
Washington	-	-	86	543	718	-	7	11	52	818	24	415
Oregon	1	2	21	327	36	2	10	10	66	1,241	79	514
California	-	18	40	402	2,298	4	91	95	127	3,609	48	1,754
Alaska	-	2	-	-	11	-	4	1	23	468	1	2
Hawaii	-	1	1	9	74	-	-	3	7	158	-	16
Guam *	-	-	-	3	2	-	-	7	-	4	-	2
Puerto Rico	-	-	148	1,169	322	-	4	2	27	392	1	19
Virgin Islands	-	-	-	1	1	-	-	2	4	13	-	1

*Delayed reports: Measles: Me. 1, N.H. 5

Mumps: Me. 26, N.H. 2, Ark. 5, Guam 2

Rubella: Me. 5, N.H. 15

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDING MAY 12, 1973 AND MAY 13, 1972 (19th WEEK) - Continued

AREA	TETANUS Cumulative 1973	TUBERCULOSIS (New Active)		TULA- REMIA Cumulative 1973	TYPHOID FEVER		TYPHUS-FEVER TICK-BORNE (Rky. Mt. spotted fever)		VENEREAL DISEASES		RABIES IN ANIMALS	
		1973	Cum. 1973		1973	Cum. 1973	1973	Cum. 1973	GONOR- RHEA	SYPHILIS (Pri. & Sec.)	1973	Cum. 1973
		1973	1973		1973	1973	1973	1973	1973	1973	1973	1973
UNITED STATES	25	701	11,547	21	5	307	9	30	17,856	469	94	1,331
NEW ENGLAND	1	18	386	-	1	4	-	1	349	5	3	74
Maine *	-	-	28	-	-	-	-	-	27	-	1	44
New Hampshire *	-	3	25	-	-	-	-	-	17	-	-	26
Vermont	-	2	10	-	-	-	-	-	12	-	1	2
Massachusetts	-	6	219	-	1	4	-	1	84	2	1	2
Rhode Island	1	2	29	-	-	-	-	-	32	-	-	-
Connecticut	-	5	75	-	-	-	-	-	177	3	-	-
MIDDLE ATLANTIC	4	110	2,370	-	-	21	-	1	2,666	91	-	8
Upstate New York	-	13	438	-	-	3	-	-	351	3	-	4
New York City	2	24	876	-	-	7	-	-	1,107	55	-	-
New Jersey	2	25	431	-	-	6	-	-	676	24	-	-
Pennsylvania	-	48	625	-	-	5	-	1	532	9	-	4
EAST NORTH CENTRAL	4	187	1,824	-	-	12	-	-	1,870	23	6	125
Ohio	1	36	564	-	-	5	-	-	602	7	-	18
Indiana	-	7	233	-	-	-	-	-	233	5	3	35
Illinois	2	45	504	-	-	2	-	-	247	7	3	37
Michigan	-	22	389	-	-	3	-	-	541	4	-	1
Wisconsin	1	77	134	-	-	2	-	-	247	-	-	34
WEST NORTH CENTRAL	4	15	435	2	-	8	-	1	861	7	33	376
Minnesota	-	5	58	-	-	3	-	-	157	4	10	125
Iowa *	-	-	40	-	-	-	-	-	113	-	8	89
Missouri	3	1	203	2	-	3	-	1	330	3	3	33
North Dakota	1	1	15	-	-	-	-	-	4	-	7	64
South Dakota	-	1	29	-	-	1	-	-	24	-	-	29
Nebraska	-	2	35	-	-	1	-	-	50	-	1	2
Kansas	-	5	55	-	-	-	-	-	183	-	4	34
SOUTH ATLANTIC	4	135	2,208	5	1	214	7	14	5,709	168	7	118
Delaware	-	2	25	-	-	-	-	1	74	-	-	-
Maryland	-	13	213	-	1	4	-	-	331	28	-	6
District of Columbia	-	3	114	-	-	-	-	-	2,076	19	-	-
Virginia	-	29	302	1	-	-	2	2	435	47	1	42
West Virginia *	-	4	119	-	-	-	-	-	81	-	3	14
North Carolina *	-	15	352	1	-	3	3	5	575	16	-	-
South Carolina	-	18	223	-	-	1	2	4	443	18	-	1
Georgia	-	23	382	3	-	1	-	2	698	6	3	38
Florida	4	28	478	-	-	205	-	-	996	34	-	17
EAST SOUTH CENTRAL	3	65	1,005	5	1	5	-	4	1,237	36	10	262
Kentucky	1	8	263	1	-	1	-	-	173	13	9	140
Tennessee	1	28	293	3	1	2	-	2	462	7	1	92
Alabama	1	18	265	-	-	2	-	2	314	6	-	30
Mississippi	-	11	184	1	-	-	-	-	288	10	-	-
WEST SOUTH CENTRAL	4	74	1,173	9	-	6	2	8	2,246	77	25	256
Arkansas	-	8	130	3	-	1	-	-	178	2	5	65
Louisiana	2	8	217	-	-	-	-	-	528	33	3	16
Oklahoma	1	5	98	4	-	1	2	8	341	1	7	81
Texas	1	53	728	2	-	4	-	-	1,199	41	10	94
MOUNTAIN	-	7	372	-	-	2	-	-	550	18	-	11
Montana	-	1	10	-	-	-	-	-	47	-	-	-
Idaho	-	-	16	-	-	-	-	-	43	1	-	-
Wyoming *	-	-	7	-	-	-	-	-	7	1	-	-
Colorado	-	-	67	-	-	-	-	-	160	5	-	-
New Mexico	-	-	85	-	-	1	-	-	46	-	-	2
Arizona *	-	6	151	-	-	1	-	-	165	-	-	9
Utah	-	-	11	-	-	-	-	-	22	1	-	-
Nevada	-	-	25	-	-	-	-	-	60	10	-	-
PACIFIC	1	90	1,774	-	2	35	-	1	2,368	44	10	101
Washington	-	7	153	-	-	-	-	-	212	4	-	-
Oregon	-	5	97	-	-	2	-	1	154	-	-	-
California	1	75	1,375	-	1	32	-	-	1,928	40	8	95
Alaska *	-	-	47	-	-	-	-	-	56	-	2	6
Hawaii	-	3	102	-	1	1	-	-	18	-	-	-
Guam *	-	-	6	-	-	-	-	-	-	-	-	-
Puerto Rico	3	9	207	-	-	1	-	-	98	18	1	15
Virgin Islands	-	-	-	-	-	-	-	-	8	-	-	-

*Delayed reports: TB: Iowa delete 1, N.C. delete 2, Wyo. delete 3, Guam 1
RMSF: Ark. delete 1
Gonorrhoea: N.H. 4, Guam 15

Syphilis: Alaska 1
Rabies: Me. delete 1, W. Va. 1, Ariz. 3

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDING MAY 12, 1973

Week No.
19

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes			Pneumonia and Influenza All Ages	Area	All Causes			Pneumonia and Influenza All Ages
	All Ages	65 years and over	Under 1 year			All Ages	65 years and over	Under 1 year	
NEW ENGLAND	652	410	24	16	SOUTH ATLANTIC	1,326	698	61	56
Boston, Mass.	218	127	12	6	Atlanta, Ga.	133	58	9	4
Bridgeport, Conn.	56	35	—	—	Baltimore, Md.	251	128	10	2
Cambridge, Mass.	20	14	—	1	Charlotte, N. C.	63	35	6	—
Fall River, Mass.	29	25	1	1	Jacksonville, Fla.	69	31	3	1
Hartford, Conn.	67	42	3	1	Miami, Fla.	111	68	3	9
Lowell, Mass.	30	23	—	1	Norfolk, Va.	66	31	7	2
Lynn, Mass.	12	7	—	—	Richmond, Va.	93	45	11	5
New Bedford, Mass.	25	22	—	—	Savannah, Ga.	47	24	2	5
New Haven, Conn.	40	19	1	—	St. Petersburg, Fla.	94	77	1	6
Providence, R. I.	37	23	2	2	Tampa, Fla.	80	45	1	10
Somerville, Mass.	11	8	—	1	Washington, D. C.	270	131	6	11
Springfield, Mass.	30	22	1	—	Wilmington, Del.	49	25	2	1
Waterbury, Conn.	40	25	2	—	EAST SOUTH CENTRAL	658	360	42	38
Worcester, Mass.	37	18	2	3	Birmingham, Ala.	108	63	3	4
MIDDLE ATLANTIC	3,214	1,896	106	117	Chattanooga, Tenn.	68	34	4	13
Albany, N. Y.	54	30	2	3	Knoxville, Tenn.	42	29	—	1
Allentown, Pa.	25	17	—	1	Louisville, Ky.	92	55	2	10
Buffalo, N. Y.	146	89	4	9	Memphis, Tenn.	155	77	16	2
Camden, N. J.	49	30	3	2	Mobile, Ala.	52	28	4	—
Elizabeth, N. J.	45	29	—	1	Montgomery, Ala.	34	15	1	5
Erie, Pa.	33	27	1	7	Nashville, Tenn.	107	59	12	3
Jersey City, N. J.	51	33	2	1	WEST SOUTH CENTRAL	1,312	712	57	48
Newark, N. J.	64	33	4	5	Austin, Tex.	48	28	2	5
New York City, N. Y. †	1,535	911	49	53	Baton Rouge, La.	40	20	3	—
Paterson, N. J.	47	29	3	1	Corpus Christi, Tex.	34	13	4	—
Philadelphia, Pa.	524	274	11	7	Dallas, Tex.	189	107	5	7
Pittsburgh, Pa.	207	116	8	9	El Paso, Tex.	57	29	4	—
Reading, Pa.	43	38	—	1	Fort Worth, Tex.	93	55	3	2
Rochester, N. Y.	114	80	2	7	Houston, Tex.	282	139	9	7
Schenectady, N. Y.	31	19	2	3	Little Rock, Ark.	61	32	6	3
Scranton, Pa.	40	23	—	—	New Orleans, La.	147	77	10	4
Syracuse, N. Y.	103	64	9	3	Oklahoma City, Okla. *	92	53	4	2
Trenton, N. J.	45	16	5	1	San Antonio, Tex.	119	62	4	5
Utica, N. Y.	26	18	1	—	Shreveport, La.	78	50	1	5
Yonkers, N. Y.	32	20	—	3	Tulsa, Okla.	72	47	2	8
EAST NORTH CENTRAL	2,373	1,390	102	65	MOUNTAIN	530	311	22	19
Akron, Ohio	60	34	4	—	Albuquerque, N. Mex.	60	34	2	8
Canton, Ohio	35	18	2	3	Colorado Springs, Colo.	30	16	2	2
Chicago, Ill.	615	331	15	13	Denver, Colo.	110	65	6	3
Cincinnati, Ohio	148	91	9	4	Las Vegas, Nev.	29	14	—	—
Cleveland, Ohio	147	81	8	3	Ogden, Utah	12	9	1	1
Columbus, Ohio	138	73	14	1	Phoenix, Ariz.	125	67	5	1
Dayton, Ohio	124	86	5	2	Pueblo, Colo.	24	17	—	2
Detroit, Mich.	325	175	18	10	Salt Lake City, Utah	54	35	4	2
Evansville, Ind.	41	31	—	2	Tucson, Ariz.	86	54	2	—
Fort Wayne, Ind.	49	31	4	7	PACIFIC	1,577	961	42	44
Gary, Ind.	27	18	—	—	Berkeley, Calif.	16	10	—	—
Grand Rapids, Mich.	73	48	—	6	Fresno, Calif.	56	29	4	1
Indianapolis, Ind.	147	85	6	1	Glendale, Calif.	16	11	—	1
Madison, Wis.	39	22	1	5	Honolulu, Hawaii	37	16	4	—
Milwaukee, Wis.	112	78	3	—	Long Beach, Calif.	94	61	1	1
Peoria, Ill.	32	13	7	—	Los Angeles, Calif.	460	281	11	12
Rockford, Ill.	42	26	4	2	Oakland, Calif.	75	48	3	2
South Bend, Ind.	66	44	1	5	Pasadena, Calif.	29	22	—	1
Toledo, Ohio	103	71	1	1	Portland, Oreg.	158	101	6	7
Youngstown, Ohio	50	34	—	—	Sacramento, Calif.	62	37	2	—
WEST NORTH CENTRAL	726	476	17	26	San Diego, Calif.	115	71	1	1
Des Moines, Iowa	48	34	1	—	San Francisco, Calif.	205	125	1	7
Duluth, Minn.	34	25	—	3	San Jose, Calif.	45	23	1	1
Kansas City, Kans.	28	18	—	3	Seattle, Wash.	111	72	3	5
Kansas City, Mo.	117	81	2	3	Spokane, Wash.	66	35	5	4
Lincoln, Nebr.	35	25	—	3	Tacoma, Wash.	32	19	—	1
Minneapolis, Minn.	90	57	3	6	Total	12,368	7,214	473	429
Omaha, Nebr.	52	34	2	—	Expected Number	12,563	7,200	534	428
St. Louis, Mo.	206	134	4	2	Cumulative Total (includes reported corrections for previous weeks)	257,772	153,474	9,429	12,268
St. Paul, Minn.	65	40	4	3					
Wichita, Kans.	51	28	1	3					

†Delayed report for week ending May 5, 1973

*Estimate based on average percent of divisional total

SMALLPOX — Continued

States of West Bengal, Uttar Pradesh, and Bihar. Urban areas, where smallpox programs have been generally less effective than in rural areas, have served as reservoirs of smallpox and disseminators of disease throughout the surrounding vicinity. Of greatest concern was the occurrence of a major epidemic in Calcutta, the largest outbreak in more than 10 years. The comparatively plentiful transport facilities in India have compounded the problem, as many persons have traveled during the incubation period thousands of miles across India and have reestablished foci of infection in smallpox-free areas. Epidemics, still incompletely reported, developed as far north-west as Jammu and Kashmir and as far east as the states bordering Burma. Efforts throughout India to strengthen the eradication program have been initiated, but without an even more substantial effort in the summer and fall, more serious epidemics could occur in 1974.

Bangladesh

After 18 months of freedom from smallpox achieved through a successful eradication program, outbreaks developed in Bangladesh in February 1972, coincident with the return of smallpox-infected refugees from India. Initially, the outbreaks were largely confined to districts in the southwest of the country, where both national and WHO staff were mobilized in an effort to restrict the outbreaks to these areas.

Because of the large number of outbreaks and problems of transport and communication, effective containment proved difficult. In addition, the summer monsoon, a period which is usually associated with a substantial seasonal decline in smallpox incidence, was exceptionally light, and many foci persisted which might otherwise have spontaneously terminated. Finally, food shortages resulted in considerable population movement and spread of smallpox throughout the country. With recognition of the magnitude of the problem, the government mobilized 20,000 health workers. No definitive decline in incidence has yet occurred, but it is still early to measure the full impact of these efforts.

Other Countries

In Botswana, 8 smallpox cases occurred in a geographically limited focus which had remained undetected for almost 5 months. Intensive containment measures have been taken and are continuing—the last known case had its onset in March 1973. Nepal has reported 17 cases as a result of 5 importations from India. An additional 8 cases which have recently occurred are under investigation as are 11 cases recently reported by Afghanistan. Single case importations also occurred in the French Territory of the Afars and the Issas, the United Kingdom, and Japan: 4 cases occurred in the United Kingdom as a result of a laboratory-acquired infection. (*Reported by the World Health Organization: Weekly Epidemiological Record, Vol. 48, No. 18, May 4, 1973.*)

 EPIDEMIOLOGIC NOTES AND REPORTS
 TYPHOID FEVER — Alabama

Between July 18 and August 23, 1972, 6 bacteriologically confirmed and 1 clinically suspect case of typhoid fever occurred among children in 3 communities in Alabama. The 5 persons who became ill in July all sought medical attention; 1 was initially diagnosed as having typhoid fever. The 2 cases which developed in August were in siblings of children who had previously been ill. The *Salmonella typhi* isolate from the 6 confirmed cases was subsequently identified as phage type E₁.

Epidemiologic investigation revealed that the children were cousins and that the 5 who became ill in July had spent some time that summer at their grandmother's house in Autauga County, Alabama. Investigation of the house and its environs revealed a fly-infested wooden shack with an outdoor pit privy in disrepair. Water was obtained from a shallow open well. Bacteriologic analysis of water samples from the well revealed coliforms too numerous to count. Cultures of stool specimens from more than 50 family members and contacts were negative, and no carrier responsible for the outbreak could be discovered.

Control measures included treating patients, using special hospitalization funds obtained from the Autauga County Commission, educating families in basic sanitary principles, and making repairs to the grandmother's well.

Nine months later, the Cleveland, Ohio, Department of Health notified the Alabama State Department of Health that a known typhoid carrier was moving from Cleveland to Autauga County. Investigation initiated by the county's public health nurse supervisor revealed that the 70-year-old new-

comer was a sister of the children's grandmother and had visited her in Alabama on July 2-3. During her stay, she had had diarrhea and fecal incontinence, having soiled the floors of her bedroom and the living room. On the day of this incident, the 5 children who became ill later in July visited their grandmother and played on the floor. All 4 stool specimens from the typhoid carrier yielded *S. typhi*, phage type E₁. (*Reported by Edna Earl Tucker, R.N., Public Health Nurse Supervisor, Marion S. Headley, Sanitarian, J. B. Dismukes, M.D., Health Officer, Autauga County Health Department; W. H. Till, M.D., general practitioner, Prattville, Alabama; Jay Renz, Director, Enteric Pathogens Section, Public Health Laboratory, Frederick S. Wolf, M.D., State Epidemiologist, Alabama State Department of Health; Rita Thomas, R.N., Public Health Nurse Supervisor, J. Glenn Smith Health Center, Marie C. Reed, R.N., and Jack Robertson, M.D., Director of Health and Public Welfare, Cleveland Department of Health; John H. Ackerman, M.D., State Epidemiologist, Ohio Department of Health; and an EIS Officer.*)

Editorial Note

The source of this outbreak would not have been discovered without the alert utilization of the information provided by the Cleveland Department of Health. It is impossible in retrospect to evaluate the relative importance of fecal soilage of the floor, contamination of water, and the prevalence of flies and possible contamination of food in this outbreak. The 2 cases occurring in August probably represent secondary spread, but the precise means of transmission is unclear.

SURVEILLANCE SUMMARY
SHIGELLA – United States, July-December 1972

Between July and December 1972, a total of 7,486 shigella isolations from humans were reported to CDC, for a national incidence rate of 40.6 isolations per 1 million population (Figure 1). This represents an increase of 1,174 (18.6%) over the 6,312 isolations reported for the preceding

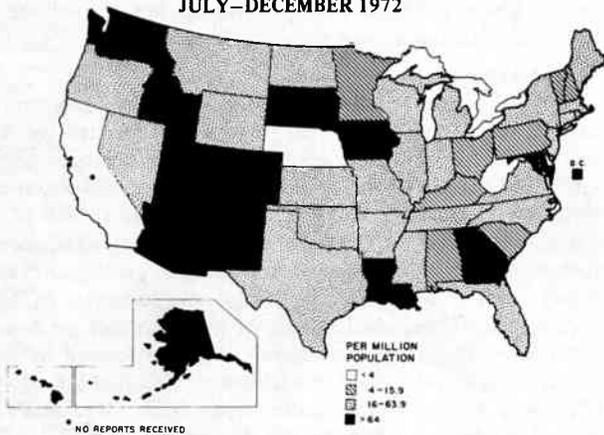
6 months and an increase of 282 (3.9%) over the 7,204 isolations reported for the corresponding months of 1971. The high degree of host specificity of shigella for man is illustrated by the fact that all except 19 of the infections reported in the last 6 months of 1972 occurred in man. The 19 nonhuman isolates were from other primates.

A total of 68.3% of reported isolations were from children under 10 years of age; the highest attack rate was in the 1-4 age group, and the second highest attack rate was in the < 1 year age group.

Of the 25 different serotypes reported, *Shigella sonnei* was the most common, accounting for approximately 79.2% of all isolations. The second most frequently isolated serotype was *S. flexneri* 2a (7.6%).

(Reported by the Enteric Diseases Section, Bacterial Diseases Branch, Epidemiology Program, CDC.)

Figure 1
ATTACK RATES OF SHIGELLOSIS, BY STATE
JULY-DECEMBER 1972



A copy of the original report from which these data were derived is available on request from

Center for Disease Control
Attn: Shigella Surveillance Activity
Epidemiology Program
Atlanta, Georgia 30333

INTERNATIONAL NOTES
QUARANTINE MEASURES

The following change should be made in the "Supplement-Vaccination Certificate Requirements for International Travel," MMWR, Vol. 22, No. 17:

New Caledonia and Dependencies

Smallpox—Delete the note.

Yellow fever—Insert code II.

The Morbidity and Mortality Weekly Report, circulation 30,500, is published by the Center for Disease Control, Atlanta, Ga.

Director, Center for Disease Control
Director, Epidemiology Program, CDC
Editor, MMWR

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Michael B. Gregg, M.D.

The data in this report are provisional, based on weekly telegraphs to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

In addition to the established procedures for reporting morbidity and mortality, the editor welcomes accounts of interesting outbreaks or case investigations of current interest to health officials.

Address all correspondence to: Center for Disease Control
Attn: Editor
Morbidity and Mortality Weekly Report
Atlanta, Georgia 30333

DHEW Publication No. (HSM) 73-8017

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
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